

Work Order ID 160915

Friday, May 05, 2017 9:44:49 AM

160915

Page 1

Item ID: PB67-43001-45

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Longitudinal Support

Start Date: 4/19/2017 Start Qty: 7.00 ***7***

Cust Item ID:

Required Date: 5/26/2017 Req'd Qty: 7.00 ***7***

Customer:

Reference: SCHEDULED/U

Approvals: Process Plan: **DAS 21** Date: **MAY 05 2017**

Tooling:

Date:

Run Start ***NR1***

QC: **9-89**

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr	
B67-43001-45	<i>D</i>	<i>AFS 17/05/05</i>

100	Small Fab	0.00							
-----	-----------	------	--	--	--	--	--	--	--

100

Small Fab

Memo

7.31

Small Fab

1- Align drill -97 and -357 using existing pilot hole of -357 as per dwg

2- Install spring pin

7 *Ø* JUN 12 2017 **DAS 19 9-89**

110

QC5- Inspect part completeness to step on W/O 0.00

110

QC

Memo

0.14

Quality Control

7 JUN 12 2017 **DAS 38 9-89**

120

Green Sandtex(Ref:4.3.5.8) per QSI005 4.3 0.00

120

Powdercoat

Memo

2.25

Powder Coating

START TIME: *10:10*
OVEN TEMPERATURE: *300°*
FINISH TIME: *10:40*

7 *Ø* 17-06-14. **DAS 34 9-89**

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
2-0 21 2-0-6				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/19/2017 **Start Qty:** 7.00 ***7***

Cust Item ID:

Required Date: 5/26/2017 **Req'd Qty:** 7.00 ***7***

Customer:

Reference: SCHEDULED/U

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

**Insp.
Stamp**

QC3- Inspect Part Finish

0.00

DAS
30
9-89

7

130

OC

Memo

0.07

Quality Control

JUN 14 2017

0.00

140

Small Fab

3.68

Small Fab

Memo

Small Fab

Assemble parts as per dwg

7 ϕ

JUN 15 2017

**DAS
19
2-80**

QC5- Inspect part completeness to step on W/O

0.00

150

QC

Memo

0.14

Quality Control

DAS
38
9-86

7

JUN 16 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
8.43 91 03								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 160915***160915***

Page 3

Item ID: PB67-43001-45

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Longitudinal Support

Start Date: 4/19/2017 Start Qty: 7.00

7

Cust Item ID:

Required Date: 5/26/2017 Req'd Qty: 7.00

7

Customer:

Reference: SCHEDULED/U

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: <u>W4003</u>	0.00							
160									
Packaging	Memo	0.07				7		DAS 6 JUN 19 2017 9-89	
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.70							
Quality Control									

DAS
21
9-89

JUN 19 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Picklist Print

Friday, May 05, 2017 9:44:48 AM

Page 1

Work Order ID: 160915

160915

Parent Item: PB67-43001-45

PR67-43001-45

Parent Item Name: Longitudinal Support

Start Date: 4/19/2017

Required Date: 5/26/2017

Start Qty: 7.00

Required Qty: 7.00

Comments: IPP Rev:A 08-07-25 new issue DD verified by:ec
16.11.22 DWG REV.D DD VERF:JLM

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
NAS1149DN632J		Purchased	No			140	Each	271.0000	1	7			DAS 19 9-89
NAS1149DN632.J										**		JUN 15 2017	

Washer

Location Loc Qty Loc Code

ST265 271
m134370 271

PB67-43001-97

Manufactured No

PR67-43001-97

Clevis

100 Each 4.0000 1 7

**

JUN 02 2017

DAS
19
9-89

Location Loc Qty Loc Code

Mezz2 4
148808 4

PB67-43001-357

Manufactured No

PR67-43001-357

Tube Arm

100 Each 0.0000 1 7

**

JUN 12 2017

DAS
19
9-89

240-107

Purchased No

240-107

SPRING SLOTTED PIN

100 Each 90.0000 1 7

**

MAY 10 2017

DAS
19
9-89

Location Loc Qty Loc Code

ST579 90
m132006 1
m134651 89

7

QA Closed: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. _____		Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
		Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐
NCR No. _____		Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
		Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		☐
Date :	Step #:			QTY Effective :					MRB (QS1042) Approval		
Description Work Order Deviation				Disposition							
3-1 31 29- 2AG 2F 2C 3-1											Completed By
											Lead hand / Supervisor Approval Verification
											QC / QA Coordinator Approval
Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Set-up	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐								
Misidentified	☐	Past Due	☐	OTHER :							

Picklist Print

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Page 2

Work Order ID: 160915

160915

Parent Item: PB67-43001-45

PB67-43001-45

Parent Item Name: Longitudinal Support

Start Date: 4/19/2017

Required Date: 5/26/2017

Start Qty: 7.00

Required Qty: 7.00

D3447-1

Manufactured No

140

Each

10.0000

1

7

D3447-1

Round Spacer

MAY 10 2017

DAS
19
9-89

Location

Loc Qty

Loc Code

Mezz2

10

153563

10

⑦

D3447-5

Manufactured No

140

Each

9.0000

1

7

D3447-5

Clevis

MAY 10 2017

DAS
19
9-89

Location

Loc Qty

Loc Code

Mezz2

9

153577

9

⑦

30345T21

Purchased No

140

Each

28.0000

1

7

30345T21

LANYARD

MAY 10 2017

DAS
19
9-89

Location

Loc Qty

Loc Code

ST581

28

M135014

10

M135998

18

⑦

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Parent Item: PB67-43001-45

Parent Item Name: Longitudinal Support

160915

PR67-43001-45

Start Date: 4/19/2017

Required Date: 5/26/2017

Start Qty: 7.00

Required Qty: 7.00

AN4-13A	Purchased	No	140	Each	474.0000	1	7	DAS
AN4-13A								19
Bolt								9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
122808	20	
GA	70	
m134634	19	
m135470	51	
over003	200	
m137371	200	
Return2017	8	
m135470	8	
ST344	176	
m137321	176	

(7)

JUN 15 2017

BSP43	Purchased	No	140	Each	4.0000	1	7	DAS
RSP43								19
RIVET								9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST557	4	
M132703	4	

(3)

JUN 02 2017

MS17984-C410	Purchased	No	140	Each	16.0000	1	7	DAS
MS17984-C410								19
QUICK PIN REPLACEMENT								9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST315	16	
m137164	10	
m137361	6	

(7)

MAY 10 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date: _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval																	
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240 17 10/1/01				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
<table style="width:100%; border: none;"> <tr> <td colspan="2" style="text-align: center; border: none;">Root Cause</td> <td colspan="3" style="text-align: center; border: none;">FAULT CATEGORY</td> </tr> <tr> <td style="border: none; vertical-align: top;"> Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="border: none; vertical-align: top;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> <td style="border: none; vertical-align: top;"> Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ </td> <td style="border: none; vertical-align: top;"> Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="border: none; vertical-align: top;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> <td style="border: none; vertical-align: top;"> Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐ </td> </tr> <tr> <td colspan="4" style="border: none; vertical-align: top;"> OTHER : ☐ </td> </tr> </table>					Root Cause		FAULT CATEGORY			Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐					
Root Cause		FAULT CATEGORY																			
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OTHER : ☐																					

Picklist Print

Friday, May 05, 2017 9:44:48 AM

Page 4

Work Order ID: 160915

160915

Parent Item: PB67-43001-45

PB67-43001-45

Parent Item Name: Longitudinal Support

Start Date: 4/19/2017

Required Date: 5/26/2017

Start Qty: 7.00

Required Qty: 7.00

MS21042L4

Purchased

No

140

Each

3,109.000

1

7

MS21042L4

Nut

JUN 15 2017

DAS

19

9-89

Location

Loc Qty

Loc Code

FP001

10

m133363

10

GA

148

m135058

148

OVER007

1400

m137371

1000

m137402

400

ST303

1551

m136986

3

m137166

12

m137321

1536

NAS1149D0416J

Purchased

No

140

Each

3,595.000

2

14

NAS1149D0416J

WASHER

JUN 15 2017

DAS

19

9-89

Location

Loc Qty

Loc Code

GA

666

m131511

666

ST264

2929

m131511

2929

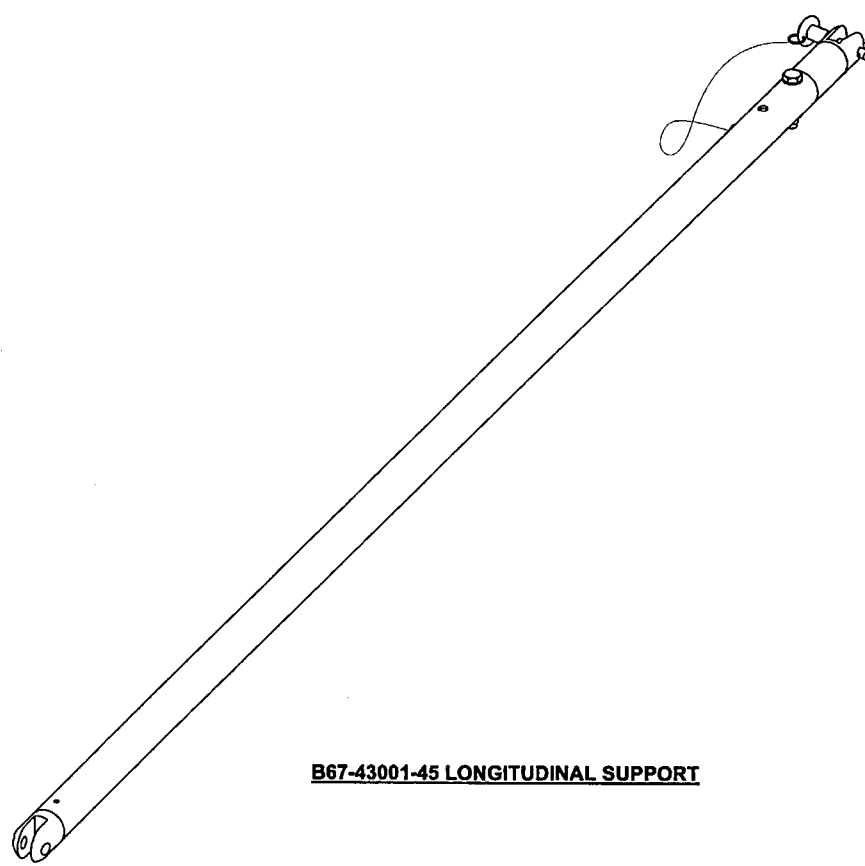
DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By _____		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



B67-43001-45 LONGITUDINAL SUPPORT

ITEM	QTY	P/N	DESCRIPTION
1	X	B67-43001-45	LONGITUDINAL SUPPORT
3	1	B67-43001-97	CLEVIS
4	1	B67-43001-357	TUBE ARM
5	1	D3447-1	ROUND SPACER
6	1	D3447-5	CLEVIS
8	1	30345T21	LANYARD
9	1	AN4-13A	BOLT
10	1	CR3213-4-2	RIVET (OR BSP43-2)
11	1	MS17984-C410	PIN, QUICK RELEASE
12	1	MS21042L4	NUT, SELF-LOCKING
13	1	MS171534	SPRING SLOTTED TENSION PIN (OR 240107)
14	2	NAS1149D0416J	WASHER
15	1	NAS1149DN632J	WASHER

SHOP COPY
RETURN TO
ENGINEERING
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 160915 MLS
170505

RELEASED
2016-11-09
ECW 16-655

D	CHANGE WASHER SIZE NAS1149DN632J WAS NAS1149DN416J (ZNC2-2) REASON, WEIGHT UPDATE, PAR15-437	SAD	16.10.17
C	REDRAWN PREMIER AVIATION DRAWING IAW DART QSI 018 AND QSI 043. FOR PREVIOUS REVISIONS, REFER TO SHEET 13 OF PREMIER AVIATION DRAWING No. B67-43001. REASON: SEE PAR#09-011.	MB	09.06.25
REV.	DESCRIPTION	BY	DATE
DESIGN	RW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD	DRAWING NO.	REV. D
CHECKED	MB	B67-43001-45	SHEET 1 OF 2
MFG. APPR.	DD	TITLE	SCALE
APPROVED	WM	LONGITUDINAL SUPPORT	NTS
DE APPR.	N/A	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	16.10.17		

APPROVED

B67-43001-97
2 CLEVIS

B67-43001-357
2 TUBE ARM

10 CR3213-4-042 RIVET
NAS1149DN632J WASHER
(30345T21 LANYARD NOT SHOWN
ON THIS VIEW FOR CLARITY)

D3447-1
ROUND SPACER

AN4-13A BOLT
NAS1149D0416J WASHER, 2X
MS21042L4 NUT

0.50

8

9

MS171534 2 8
SPRING SLOTTED TENSION PIN

10 30345T21 LANYARD

MS17984-C410
QUICK RELEASE
PIN

9
2 PL

D3447-5
CLEVIS

B67-43001-45 LONGITUDINAL SUPPORT

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.01 lbs
- 8) PRIOR TO POWDER COAT, ALIGN B67-43001-97 ON B67-43001-357 AS SHOWN AND DRILL A $\phi 0.129$ HOLE THROUGH BOTH PARTS. FASTEN B67-43001-97 TO B67-43001-357 USING MS171534 SPRING SLOTTED TENSION PIN.
- 9) MASK PRIOR TO POWDER COAT
- 10) BEFORE OR AFTER POWDER COAT, DRILL A $\phi 0.129$ HOLE IN B67-43001-357 TO INSTALL THE LANYARD. DRILL THROUGH ONE WALL ONLY. AFTER POWDER COAT, INSTALL 30345T21 LANYARD ON B67-43001-357 AS SHOWN USING CR3213-4 TYPE RIVET AND NAS1149DN632J WASHER.

RELEASED
2016-11-09

APPROVED

DESIGN	RW	DART AEROSPACE LTD	
DRAWN	SAD	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MB	DRAWING NO.	REV. D
MFG. APPR.	DD	B67-43001-45	SHEET 2 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	N/A	LONGITUDINAL SUPPORT	NTS
DATE	16.10.17	COPYRIGHT © 1985 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	